

REMARKS

Claims 48 through 62 are now presented for examination. Claim 59 has been cancelled without prejudice or disclaimer of subject matter. Claims 48 and 61 have been amended to define still more clearly what Applicants regard as their invention, in terms which distinguish over the art of record. Claims 48 is the only independent claim.

Claims 48-54 and 60-62 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,406,245 to Hasegawa et al. Claims 55-58 have been rejected under 35 U.S.C. § 103 as being unpatentable over Hasegawa et al. (as applied to claim 48). With regard to the claims as currently amended, these rejections are respectfully traversed.

Independent Claim 48 as currently amended is directed to exposure apparatus that exposes a wafer to a pattern. In the apparatus, a chamber having atmosphere conditioned to be different from an atmosphere in another apparatus outside the exposure apparatus exposes the wafer to the pattern. The atmosphere in the chamber is purged with an inert gas. A port section through which the wafer is transferred between the chamber and the other apparatus has a load-lock mechanism that includes a vacuum mechanism to create a vacuum below atmospheric pressure inside the port section and a supply mechanism that supplies the inert gas into the inside of the port section.

In Applicants' view, Hasegawa et al. discloses a processing system which has first and second chambers. Each chamber accommodates a processing apparatus therein and each chamber is able to be kept gas tight. A coupling member couples the processing apparatuses accommodated in the first and second chambers with each other. An elastic gas tightness

holding member gas tightly seals portions between the coupling member and the first and second chambers.

According to the invention defined in Claim 48, a chamber of an exposure apparatus in which a wafer is exposed to a pattern has an atmosphere conditioned to be different from the atmosphere of an outside apparatus, the atmosphere in the chamber being purged with an inert gas. The wafer is transferred between the chamber and the other apparatus through a port section that has a load-lock mechanism which includes a vacuum mechanism for creating a vacuum below atmospheric pressure inside the port section and a supply mechanism for supplying the inert gas into inside the port section. Advantageously, a wafer can be loaded or unloaded with a small amount of purge gas without decreasing the internal cleanliness of the chamber having an inert gas atmosphere.

Hasegawa et al. may teach a processing system with first and second chambers each having processing apparatuses and a coupling member that couples the processing apparatuses in the first and second chambers to each other. With respect to the process chamber 101 and the load chamber 102a in Fig. 3 of Hasegawa et al., it is disclosed at lines 56 to 60 of column 5 "Also, by means of a gas supplying and discharging system which comprises a pump and a regulator, for example, a reduced pressure state and an atmospheric pressure state can be selectively produced in each of the process chamber 101 and the load chamber 102a, independently of each other." The Hasegawa et al. disclosure, however, is devoid of any suggestion of purging the atmosphere of an exposure apparatus chamber with an inert gas and fails to teach or suggest that the port section for transferring a wafer between an exposure apparatus chamber and another apparatus has a load-lock mechanism with a vacuum mechanism

that creates a vacuum below atmospheric pressure inside the port section and a supply mechanism that supplies the inert gas into the inside of the port section as in Claim 48. Accordingly, it is not seen that Hasagawa et al.'s selectively producing a reduced pressure state and an atmospheric state in a process chamber and a load chamber independently of each other teaches or suggests the features of Claim 48 at least with respect to purging inert gas in a exposure apparatus chamber and supplying the inert gas into the port section. It is therefore believed that Claim 48 as currently amended is completely distinguished from Hasegawa et al. and is allowable.

With regard to the rejection of Claims 55-58 in view of Hasegawa et al., it is noted that the present application and Hasegawa et al. are commonly assigned to Canon Kabushiki Kaisha and it is requested that the rejection should be reconsidered in view of 35 U.S.C. § 103(c).

For the foregoing reasons, Applicant submits that the present invention, as recited in independent claim 48 as currently amended, is patentably defined over the cited art.

Dependent claims 49-58 and 60-62 also should be deemed allowable, in their own right, for defining other patentable features of the present invention in addition to those recited in their respective independent claims. Further individual consideration of these dependent claims is requested.

Applicant further submits that the instant application is in condition for allowance. Favorable reconsideration, withdrawal of the objections and rejection set forth in the above-noted Office Action and an early Notice of Allowance are respectfully requested.

Applicant's attorney, Steven E. Warner, may be reached in our Washington, D.C. office by telephone at (202) 530-1010 All correspondence should continue to be directed to our address given below.

Respectfully submitted,

A handwritten signature in cursive script, reading "Jack S. Cubert", written over a horizontal line.

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